



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/832,094 | 04/11/2001 | Suguru Nakada | Q64033 | 8669 |

7590 10/22/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

LE, VIET Q

ART UNIT PAPER NUMBER

2667

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,094

Applicant(s)

NAKADA, SUGURU

Examiner

Viet Q. Le

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/11/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities:

As for claim 5, there appears to be duplicated words attached to the word "preamble" on page 15, lines 12-13. The examiner believes that the wording should be "... and a propagation delay time of said preamble" instead of "... and a propagation delay time of said preamble said the propagation delay time; ..."

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As in claim 1, the claim recites the limitation "said random access" on line 7 of page 14. There is insufficient antecedent basis for this limitation in the claim.

As in claim 3 stated on line 20 of page 14: "one of the stored propagation delay time". "time" is indefinite and it can be any delay time out of the range of the stored propagation delay times stored in the memory of the base station.

Art Unit: 2667

As in claim 6, the claim recites the limitation "said delay time" on line 19 of page

15. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-3 and 5-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 and 11 of U.S. Patent No. 6,751,465.

Regarding claims 1-3 of the instant application, both claims 1-3 and claim 11 of U.S. Patent No. 6,751,465 are directed to a "random access control method" or a "method of permitting communication in a radio communication permission control apparatus". Both methods comprise steps of: receiving request signals from communication terminals, responding or transmitting to communication terminals allowing or disallowing communication access to the base station, storing previously rejected signal requests, and providing priority to previously rejected signals in storage.

Claim 11 of U.S. Patent No. 6,751,465 fails to specifically spell out the use of the preamble signal as a request signal from the communication terminals to the base station and fails to specify the use of propagation delay as a position relation data as an address for these communication terminals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to understand that these 2 methods are the same method or process performing the same objectives of communicating with communication terminals from the base station allowing or disallowing the message or data based on priority to previously rejected requested signals. The motivation are to specifically spell out the use of requesting signals to be the preamble signals and the position relation data as the propagation delay data.

Regarding claims 5-7 of the instant application, both claims 5-7 and claim 1 of U.S. Patent No. 6,751,465 are directed to a radio communication permission control apparatus or more specifically the base station apparatus. Both apparatuses comprise of the receiving section to receive communication request signals from requesting communication terminals. Both apparatuses also comprise of the correlation unit or estimating section, used to provide correlation between stored signal values with the incoming signals. Both apparatuses also comprise the signal determination unit or just a determining section used to allow or disallow message or data from the communication terminals based on priority to prohibited communication terminals stored in memory. Both apparatuses also comprise the code generation unit or just a reply section to generate the reply signals allowing or disallowing messages or data from the

Art Unit: 2667

communication terminals. Both apparatuses comprise of the storage section or memory. Both apparatuses perform functions of transmitting to communication terminals allowing signals, storing prohibited signals and give priority to prohibited signals.

Claim 1 of U.S. Patent No. 6,751,465 fails to specifically spell out the use of the preamble signal as a request signal from the communication terminals to the base station and fails to specify the use of propagation delay as a position relation data as an address for these communication terminals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to understand that these 2 apparatuses are the same apparatus with method or process performing the same objectives of communicating with communication terminals from the base station allowing or disallowing the message or data based on priority to previously rejected requested signals. The motivation are to specifically spell out the use of requesting signals to be the preamble signals and the position relation data as the propagation delay data.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2667

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii (US Pub. No. 2001/0041573) in view of Miura (EP 0982871A2).

Regarding claims 1 and 2, Ishii discloses a communication method between base station and communication terminals comprising steps of: receiving preamble signals from communication terminals and utilizing internal logic to decide whether or not to transmit to communication terminals allowing or disallowing communication access to the base station. (See Fig. 1; see column 1, lines 50-63 of page 2, see column 2, lines 1-10 of page 2).

Ishii fails to disclose storage of the propagation delay times for rejected signals.

Miura teaches the use of correlating the propagation delay to a value and compare it to a certain stored threshold value (See page 3, column 4, paragraph 17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ishii method to incorporate Miura method of correlating the propagation delay to a correlated value and store it to the memory for rejected signals. The motivation is to use the correlated value as an address for identifying the rejected signals to provide priority to these same communication terminals when they request communication to the base station at a later time.

8. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US Pub. No. 2001/0008524) in view of Miura (EP 0982871A2).

Regarding claim 1 and 2, Nakamura discloses a communication method between base station and communication terminals comprising steps of: receiving preamble signals from communication terminals and utilizing internal logic to decide whether or

Art Unit: 2667

not to transmit to communication terminals allowing or disallowing communication access to the base station. (See Fig. 1; Fig 2, block S1, S3, S4; see column 2, lines 1-10 of page 2).

Nakamura fails to disclose storing the propagation delay times for rejected signals.

Miura teaches the use of correlating the propagation delay to a value and compare it to a certain stored threshold value (See page 3, column 4, paragraph 17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Nakamura method to incorporate Miura method of correlating the propagation delay to a correlated value and store it to the memory for rejected signals. The motivation is to use the correlated value as an address for identifying the rejected signals to provide priority to these same communication terminals when they request communication to the base station at a later time.

9. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US Pub. No. 2001/0008524) in view of Miura (EP 0982871A2).

Regarding claim 5 and 6; Nakamura discloses a communication system or apparatus communicating between the base station and communication terminals comprising of: the receiving unit (See Fig. 1, blocks 4 and 6; Fig. 2, block S1; See page 2 and 3, paragraph 19-24), the correlation unit (See Fig. 1, block 12; See page 2 and 3, paragraph 19-24), the preamble determination unit (See Fig. 1, block 12; See page 2 and 3, paragraph 19-24), the code generation unit (See Fig. 1, block 14 ad 16; Fig. 2,

Art Unit: 2667

block S4; See page 2 and 3, paragraph 19-24) and the memory unit (See Fig. 1, block 20; See page 2 and 3, paragraph 19-24).

Nakamura fails to disclose the use of propagation delay times that can be used to correlate to a correlation value in the invention.

Miura teaches the use of correlating the propagation delay to a value and compare it to a certain stored threshold value (See page 3, column 4, paragraph 17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Nakamura apparatus to incorporate Miura method of correlating the propagation delay to a correlated value and store it to the memory for rejected signals. The motivation is to use the correlated value as an address for identifying the rejected signals to provide priority to these same communication terminals when they request communication to the base station at a later time.

Allowable Subject Matter

10. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason that the claim can be allowable is that the base station provides priority to terminals on the basis of electric power, Eb/NO ratio, data error rate in addition to propagation delay time.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

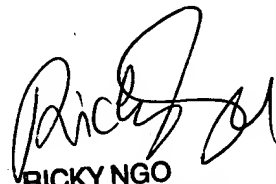
- a) Ichikawa et al. (JP10-042343), Portable terminal position detecting method of micro cell mobile communication system.
- b) Koichi (JP07-087091), Centralized radio communication system
- c) Kawabata et al. (JP10-178386), CDMA system, its transmitter-receiver and random access method.
- d) Larsson et al. (EP0760564), Random access in multi-carrier system.
- e) Okamoto et al. (JP05227124), Code division multiple access communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Le whose telephone number is 571-272-2246. The examiner can normally be reached on 8 AM -5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RICKY NGO
PRIMARY EXAMINER